

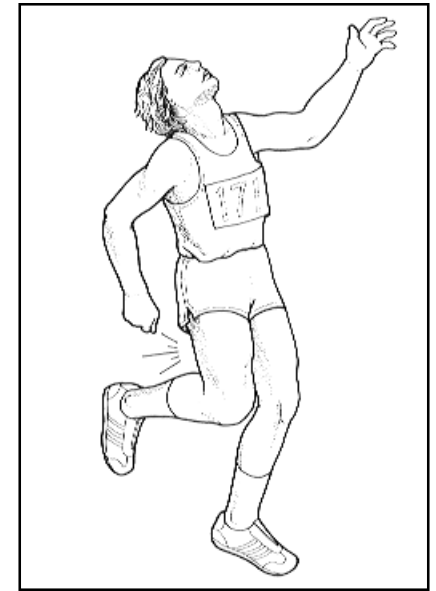


SPRAINS AND STRAINS



What are Sprains, Strains and Contusions?

- Sprains result from overstretching or tearing of the joint capsule or ligament. Ligaments are tissues that connect bone to bone. The joint capsule is similar to a ligament and surrounds the joint.
- Strains, also referred to as pulls, result from overstretching or tearing a of muscle or tendon. Tendons are tissues that attach muscles to bones.
- Contusions or hematomas, commonly called a bruise, are an injury to tissue or bone in which the skin is not broken. Blood vessels rupture and bleed into the tissue causing discoloration.



Signs and Symptoms:

- Sprains and strains have similar signs and symptoms, the difference is in location. Sprains are along the joint and strains are along the muscle.
- Symptoms will increase depending on the severity of injury. Examples include: pain, muscle spasm, muscle weakness, swelling, and a pop or crack sensation or sound.
- Bruises are usually purple at first, then gradually fade to various shades of brown, yellow, and green as they rise to the surface of the skin.

How do they happen?

- **Sprains** result from trauma such as falling or twisting and most often affect the ankle, knee or AC joints.

- **Strains** can be acute such as from an excessive muscle contraction during lifting or chronic from over-use type repetitive movements or prolonged positions, i.e. sitting at the computer. Strains often affect the back muscles and hamstrings.
- **Contusions** often result when soft tissue is struck hard, as in a fall or blow.

How are they treated?

- Treatment for sprains and strains will depend on the extent of damage done to the muscle, ligament or tendon. Self-help measures may be all that are needed. For mild injuries, use **R.I.C.E.**: Rest, Ice, Compression, Elevation.
- **Rest** the injured part from painful activity.
- **Ice** is applied for 15 to 20 minutes.
- **Compression**- apply a wrap starting at the point furthest from heart with tightness decreasing as you go towards the heart.
- **Elevation** should be above the level of the heart.
- Sprains and strains can benefit from rehabilitation exercises and activity modification during recovery. Your healing can be improved by specific exercises that restore range of motion, strength and normal function.

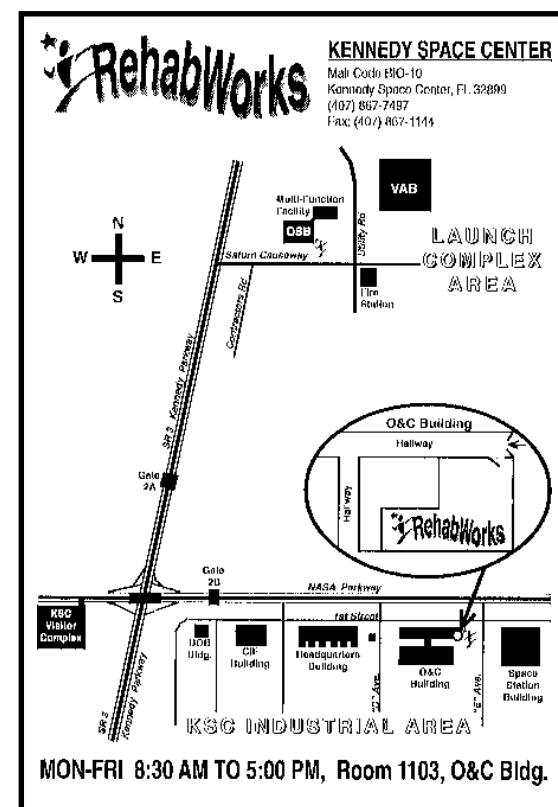
Use of ICE:

- Ice should be applied to acute (new) injuries. The key is to apply ice as soon as possible. Ice helps the healing process by penetrating the tissue and slowing down blood flow to the injury area, which reduces swelling and pain. When icing, several sensations are experienced: cold, stinging, burning and numbness. If icing is stopped and re-applied these stages will be prolonged.
- Use ice for 48 to 72 hours. If using ice packs remember 20 minutes on, 1 hour off. Stop icing once the skin is numb.
- A wet towel can be placed between the ice pack and skin to protect the skin from damage.
- Commercial packs should be used with caution; leaks can cause chemical burns to the skin.
- Do not use ice if you have Periph-

eral Vascular Disease, Reynauld's Disease or low tolerance to cold.

Resources

[Http://www.aaos.org](http://www.aaos.org)



RehabWorks
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 fax (407) 867-1144
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